



AMERICA MAKES: Accelerating Advanced Manufacturing & Innovation

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When America Makes, America Works®

MISSION

To accelerate the adoption of additive manufacturing by convening, coordinating, and catalyzing the AM industry to help advance U.S. manufacturing competitiveness and security.

MII Technology Vertical	Additive Manufacturing / 3D Printing
MII Established	August 2012
Institute Location	Youngstown, Ohio
Non-profit Legal Entity	National Center for Defense Manufacturing and Machining (NCDMM)
Membership	368 as of June 2026 from Industry, Academia, and Government
Facility	12,000 ft² of convening/collaboration space in Youngstown, Ohio
Expenditures & Cost Share	Portfolio valued at \$659.4M
Contract Vehicle	Cooperative Agreement (CA) managed through Air Force Research Laboratory (AFRL)
Project Portfolio	396 Projects (107 Active)

Proud to partner with:



Strategic Focus Areas



Technology Development

Advancing Research & Technology

Partner with industry to drive investments in pre-competitive applied research and industrially-relevant manufacturing technologies.



Education & Workforce Development

Securing Human Capital

Educate, train, and grow the advanced manufacturing workforce by developing accessible industry-relevant tools to build strong talent pathways in AM.



Industrial Base Integration

Increase Awareness & Adoption of AM

through regional, state, and national communities of practice within key regions and across industry, aligned around common objectives to spur economic growth and secure American competitiveness.

Strategic Framework

Approach to generate meaningful and sustainable impact

Approach in place since inception of the Institute, and the foundation of how America Makes delivers value to the DoD, AM ecosystem, and nation.

Convene

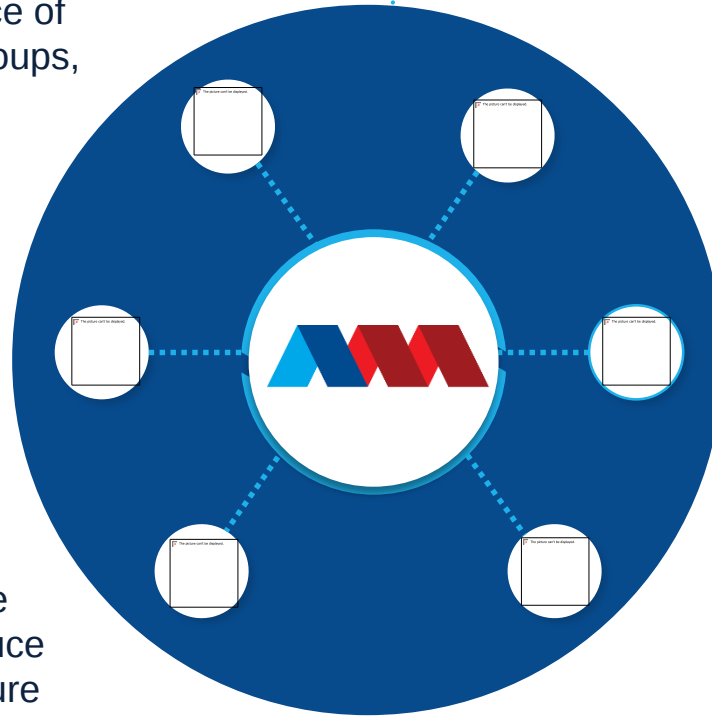
Membership engagement captured as the voice of industry via roadmaps, working and advisory groups, workshops and strategic account management

Identify

Understand and document the **strategic needs and gaps** while serving as an unbiased convener to ensure comprehensive perspectives are considered

Prioritize

Strategic prioritization through pre-competitive roadmaps and national investment plans to reduce barriers, connect dots, and curate inputs to ensure an effective national strategy



Scale

Scale and amplify impacts through effective reuse of pre-competitive research, training assets, and ecosystem programs

Disseminate

Thought leadership shared through CORE data repository, Technical Review & Exchange, strategic communications, standards, conferences, events, and publications

Execute

Verify and validate results, execution excellence in managing member-led efforts addressing prioritized research, EWD, and ecosystem requirements

Aerospace and Defense Applications

Lightweight Flight Components

Enabled by AM design optimization

Rapid Sustainment & Repair

On-demand component restoration and replacement

Contested Logistics

Distributed manufacturing for resilient part availability

High-Performance Materials for Extreme Environments

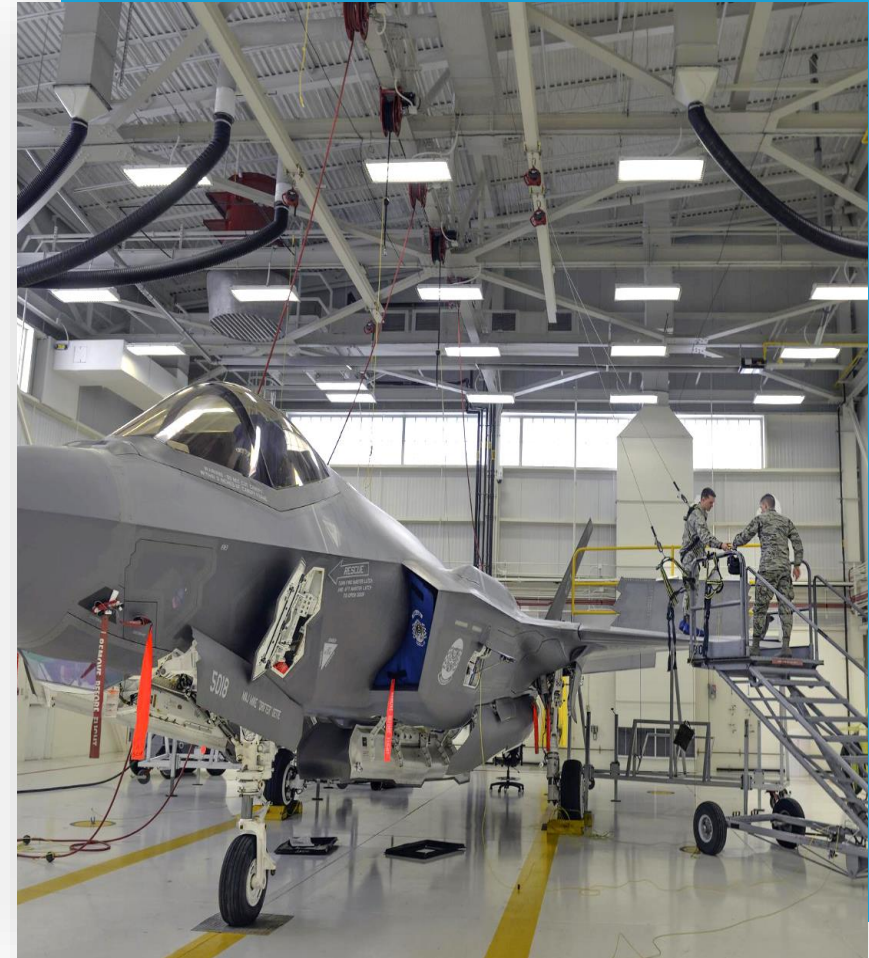
Advanced alloys and processing controls for

Flight-Critical Part Certification

Qualification methods and statistically based allowables

Unmanned Systems

Rapid iteration of tactical drones in attritable settings



Impact of America Makes

Technology Development

- Reducing novel material commercialization from 10+ years to 5
- Reduced AM certification timelines from 30 years to 7
- **Delta Qual:** Faster requalification; enabling AM supply-chain agility

Education & Workforce Development

- 400K courses taken by **>100K learners** through ToolingU-SME additive program
- **AMTrain:** Modern EdTech platform for curated state of the art additive training
- 4,188 service members + Vets impacted over the past 5 years

Industrial Base Integration

- AM CPR, AM NOW, JAMMEX: **supply chain readiness**; resilient industrial base with interoperable suppliers
- ATLAS-3D → Siemens Sunata™: Lab-to-market **tool transition** for distortion prediction & orientation automation

Why Aren't We Done Yet?

Important aspects still need to be solved in all 3 strategic focus areas: Technology, EWD, and Industrial Base

Remaining Challenges

- Repeatability and reproducibility
- **Qualification** (material, process, product)
- **Qualification cost and efficiency**
- **Inspectability** – technology and efficiency
- Fracture critical parts
- Certification
- Cost and cost reduction
- **Scaling to full production** (equivalence, requalification efficiency)
- Can vs. should
- Access to capital
- **Vendor qualification**

Known Limitations

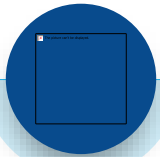
- **Number of commercially available materials**
- **Number of qualified sources of supply**
- Knowledge base
- Implementation of DfAM
- **Trained workforce**
- Manufacturing operations experience
- **Size of parts**
- Feature sizes (e.g., section thickness)
- Most suited towards high mix, low volume applications
- **Serviceability, maintenance, and limitations** not well understood

Convene. Coordinate. Catalyze.

We CONVENE

the most brilliant minds from government, industry, and academia to accelerate AM innovation

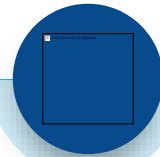
- Working & Advisory Groups
- Events (TRX, MMX)
- Tradeshows & Conferences
- Workshops & Trainings



We COORDINATE

AM technical and workforce data to transform industry

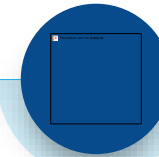
- CORE Data Repository
- Technology Roadmap
- Sector Specific Roadmaps
- Standardization Collaborative



We CATALYZE

industry through collaborative projects, delivering high value and high impact

- Project Calls & Directed Projects
- Manufacturing Readiness
- Teaming
- Supply Chain Development



City of Riverside Membership

Silver Membership | \$15,000 Annual Investment | Cost Share Program (No Upfront City Cost)

The City of Riverside is pursuing a Silver Membership with America Makes to strengthen business attraction, workforce development, and advanced manufacturing initiatives.

Through the America Makes Cost Share Program, the City can fulfill the annual membership investment through eligible participation activities, resulting in no upfront membership cost while gaining access to a national innovation network.

Key Benefits

- National industry collaboration
- Business attraction and site selection support
- Workforce and education partnerships
- Research, market intelligence, and technical resources
- Leadership and national visibility



Economic Development Support to Date

- Site Selection Assistance – Identifying and evaluating potential headquarters locations throughout Downtown Riverside
- Strategic Partner Introductions – Connecting America Makes with higher education, workforce, industry, and regional partners to build a strong innovation ecosystem.
- Regional Collaboration – Participating in initiatives such as Aerospace Summer Camp to advance aerospace, additive manufacturing, workforce development, and business attraction across the Inland Empire.
- National Engagement – Participating in MMX (Members Meeting & Exchange), America Makes' annual conference bringing together industry, government, academia, and workforce leaders to strengthen partnerships and advance additive manufacturing.



Recommendation:

That the Economic Development Committee receive and file the America Makes update and presentation.



*Thank
you!*